RTIP ID# *(required)* LA0D450

TCWG Consideration Date: Tuesday, October 26, 2010

Project Description *(clearly describe project)*

The proposed project would reconfigure the approximately 2.5-mile confluence of SR-57 and SR-60, which are major inter-regional freeways, linking cities in the San Gabriel Valley and the Inland Empire with Los Angeles and Orange Counties. Two build alternatives are being considered. Both build alternatives would add auxiliary lanes, with associated on-/off-ramp reconfiguration; bypass connectors; overcrossing structures at Prospector Road and Diamond Bar Boulevard; and a new Grand Avenue overcrossing.

Alternative 2 – Combination Cloverleaf/Diamond Configuration Interchange Alternative

Alternative 2 would maintain the existing interchange configuration (compact-diamond) for the eastbound SR-60 on- and off-ramps. The interchange configuration at Grand Avenue for Alternative 2 would remain as a combination of partial cloverleaf for the westbound direction. The westbound loop on-ramp from Grand Ave would join the freeway as an auxiliary lane (existing) that is connected to an existing bypass connector to WB SR-60. An auxiliary lane would also be added in the eastbound direction that extends from the eastbound on-ramp at Grand Avenue to the new connector that bypasses the north/east SR-57/SR-60 interchange. A southbound SR-57 drop lane would be extended to a realigned westbound SR-60 off-ramp to Grand Avenue, creating a two-lane exit ramp.

A new bypass off-ramp is proposed on eastbound SR-60 west of the southern/western SR-57/SR-60 junction. The existing northbound SR-57 to eastbound SR-60 connector would be realigned to accommodate the new bypass ramp and existing connector structure. A bypass connector would also be built at the northern/eastern SR-57/SR-60 junction, and this connector would require new overcrossing structures at Prospector Road and Diamond Bar Boulevard as well as realignment of the Diamond Bar Boulevard on-ramp.

The existing Grand Avenue overcrossing would be replaced with a new overcrossing structure over SR-60. Two 450-foot-long double left-turn lanes would be constructed on southbound Grand Avenue to provide access to the eastbound SR-60 on-ramp at Grand Avenue. The new Grand Avenue overcrossing would be widened to accommodate eight through lanes and double left-turn lanes.

The widening of Grand Avenue would continue south to Golden Springs Drive. Golden Springs Drive would be widened to allow additional through lanes, double left-turn lanes, and one right-turn lane on three legs of the intersection of Grand Avenue and Golden Springs. One right-turn lane would be provided on Grand Avenue on the northbound approach to Golden Springs Drive. Approximately 600 feet of Grand Avenue in the northbound direction south of the intersection at Golden Springs would be restriped to three lanes.

Alternative 3 – Partial Cloverleaf Interchange Configuration Alternative

Under Alternative 3, the existing eastbound on- and off-ramps at Grand Avenue, which form a compact diamond interchange, would be reconfigured as a partial cloverleaf interchange. The new intersection of Grand Avenue and the new eastbound on- and off-ramps would be located approximately 500 feet south of the existing intersection, or midway between the freeway and Golden Springs Drive. The new eastbound on-ramp would be a loop on-ramp that would join SR-60 as a new eastbound auxiliary lane. The existing eastbound on-ramp would be realigned to accommodate the widened Grand Avenue and would merge into the eastbound auxiliary lane created by a new southbound Grand Avenue to eastbound SR-60 loop on-ramp. The auxiliary lane would continue until joining an existing auxiliary lane on the eastbound SR-60 after the SR-57/SR-60 split. A southbound SR-57 drop lane would be extended to a realigned westbound SR-60 off-ramp to Grand Avenue, creating a two-lane exit ramp.

Alternative 3, like Alternative 2, also would widen Grand Avenue south to Golden Springs Drive. Golden Springs Drive would be widened to allow additional through lanes, double left-turn lanes, and one right-turn lane on three legs of the intersection of Grand Avenue and Golden Springs. One right-turn lane would be provided on Grand Avenue on the northbound approach to Golden Springs Drive. Approximately 600 feet of Grand Avenue in the northbound direction south of the intersection at Golden Springs would be restriped to three lanes.

As in Alternative 2, a new bypass off-ramp is proposed on eastbound SR-60 west of the southern/western

SR-57/SR-60 junction. The existing northbound SR-57 to eastbound SR-60 connector would be realigned to accommodate the new bypass ramp and existing connector structure. A bypass connector would also be built at the northern/eastern SR-57/SR-60 junction, and this connector would require new overcrossing structures at Prospector Road and Diamond Bar Boulevard as well as realignment of the Diamond Bar Blvd on-ramp.

Similar to Alternative 2, the existing Grand Avenue overcrossing would be replaced with a new overcrossing structure over SR-60. However, unlike Alternative 2, a double left-turn lane from southbound Grand Avenue to the eastbound on-ramp would not be required, since vehicles traveling on southbound Grand Avenue would access northbound SR-57 and eastbound SR-60 by way of the new loop on-ramp on the west side of Grand Avenue. The new Grand Avenue overcrossing would be widened to accommodate the eight through lanes with a center divider/median.

Type of Project *(use Table 1 on instruction sheet)*

Change to Existing State Highway

County	**Narrative Location/Route and Post Miles**
Los Angeles	The proposed project would occur where SR-57 and SR-60 meet and interconnect in the City of Diamond Bar and the City of Industry in Los Angeles County. Specifically, the proposed project would occur from post mile R23.7 to R26.5 on SR-60 and from R4.3 to R4.5 and R4.5 to R4.8 on SR-57. The two separate freeways share an alignment for approximately 1.26 miles along the northbound/eastbound direction and approximately 1.34 miles along the southbound/westbound direction, following a generally northeasterly-southwesterly orientation. Proposed improvements would occur along the approximately 2.5-mile confluence and at the Grand Avenue interchange. Refer to attached Figures 1 through 3 for a regional location map, a project vicinity map, and project alternative layout drawings from the traffic study, respectively. **Caltrans Projects – EA# 279100**

Lead Agency: California Department of Transportation (NEPA/CEQA)

Contact Person	**Phone#**	**Fax#**	**Email**
Andrew Yoon	(213) 897-6117		Andrew.Yoon@dot.ca.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5** X **PM10** X

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)		**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**
	X				

Scheduled Date of Federal Action: September 9, 2011

NEPA Delegation – Project Type *(check appropriate box)*

Exempt	**Section 6004 – Categorical Exemption**		**Section 6005 – Non-Categorical Exemption**
		X	

Current Programming Dates *(as appropriate)*

	PE/Environmental	ENG	ROW	CON
Start	March 2009	Sept. 2011	April 2012	April 2014
End	Sept. 2011	May 2013	Sept. 2013	May 2016

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The primary purposes of the proposed project is to improve traffic operations and safety of the SR-57 and SR-60 freeways at the Grand Avenue interchange to accommodate existing and projected traffic volumes at an acceptable level of service (LOS) through 2035. Currently, the Grand Ave Interchange is approaching capacity and experiencing LOS deficiencies at ramp intersections that would adversely affect the mainline flows in the future.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The area surrounding the project site consists of open space and residential uses to the west and northwest of the SR-57/SR-60 confluence; residential uses to the west and northwest of the southwest project limit; residential uses to the northwest, north, and east of the northeast project limit, and; a golf course south of the SR-57/SR-60 confluence. There is a fast-food restaurant and a former auto dealership that is no longer in business to the southwest of the Grand Avenue at SR-60 westbound off-ramp intersection, and there is a Target store to the southwest of the Grand Avenue at Golden Springs Road intersection. The fast-food restaurant has a former children's playground area that faces the freeway. The playground area has been closed for some time and will not be reopened, according to restaurant management (Aragues pers. comm.). The restaurant manager said on a site visit on June 2, 2009, and a subsequent telephone conversation on June 12, 2009, that no replacement playground equipment or other sensitive uses are planned for the area currently occupied by the playground.

The closest sensitive receptors to the project area are residences located approximately 100 feet northwest of the SR-57/SR-60 confluence; residences approximately 150 feet southwest of the northeast project limit; a private preschool, La Petite Academy, located approximately 200 feet south of the Grand Avenue at Golden Springs Road intersection and approximately 50 feet west of Grand Avenue, and; the Diamond Bar Montessori Academy located approximately 200 feet to the southwest of SR-60 about 0.20 mile northeast of the SR-57/SR-60 split. There are also numerous schools located within 0.50 mile of the project site. Some of the residences northwest of the SR-57/SR-60 confluence are elevated from the freeway, and residences in this area not elevated from the freeway are protected by a sound wall. The residences southwest of the northeast project limit and the Diamond Bar Montessori Academy southwest of SR-60 about 0.20 mile northeast of the SR-57/SR-60 split are protected from the freeway by dense trees. The La Petite Academy is not protected from Grand Avenue. Please refer to Figure 4 for a map of air quality sensitive land uses.

Opening Year: Build and No Build LOS, AADT, % and # Trucks, Truck AADT of Proposed Facility

Table 1. 2016 Intersection LOS and Delay

No Build (Alternative 1)						
	AM Peak Period			PM Peak Period		
Intersection	Queue Length (feet)	Delay[c]	LOS	Queue Length (feet)	Delay[c]	LOS
Grand Ave at SR-60 Westbound Off-Ramp[a]	746	127.3	F	290	49.6	D
Grand Ave at SR-60 Eastbound Ramps[a]	617	51.2	D	345	143.3	F
Grand Ave at Golden Springs Rd[b]	747	53.7	D	969	238.6	F
Alternative 2						
	AM Peak Period			PM Peak Period		
Intersection	Queue Length (feet)	Delay[c]	LOS	Queue Length (feet)	Delay[c]	LOS
Grand Ave at SR-60 Westbound Off-Ramp[a]	515	43.0	D	280	22.6	C
Grand Ave at SR-60 Eastbound Ramps[a]	444	26.6	C	181	35.9	D
Grand Ave at Golden Springs Rd[b]	486	37.1	D	454	163.3	F
Alternative 3						
	AM Peak Period			PM Peak Period		
Intersection	Queue Length (feet)	Delay[c]	LOS	Queue Length (feet)	Delay[c]	LOS
Grand Ave at SR-60 Westbound Off-Ramp[a]	258	23.0	C	175	18.9	B
Grand Ave at SR-60 Eastbound Ramps[a]	208	12.7	B	70	6.7	A
Grand Ave at Golden Springs Rd[b]	498	37.5	D	472	61.8	E

[a] Queue length in feet on freeway off-ramp approach

[b] Queue length in feet on southbound approach

[c] Delay in seconds per vehicle average.

Source: KOA Corporation 2010

Refer to the attached sheet for Table 2 (2016 ADT), Table 3 (2016 Truck Percentages), and Table 4 (2016 Truck ADT).

RTP Horizon Year/Design Year: Build and No Build LOS, AADT, % and # Trucks, Truck AADT of Proposed Facility

Table 5. 2035 Intersection LOS and Delay

No Build (Alternative 1)						
	AM Peak Period			PM Peak Period		
Intersection	Queue Length (feet)	Delay[c]	LOS	Queue Length (feet)	Delay[c]	LOS
Grand Ave at SR-60 Westbound Off-Ramp[a]	1,062	170.9	F	628	236.7	F
Grand Ave at SR-60 Eastbound Ramps[a]	626	113.7	F	394	196.3	F
Grand Ave at Golden Springs Rd[b]	381	34.3	E	373	43.0	D
Alternative 2						
	AM Peak Period			PM Peak Period		
Intersection	Queue Length (feet)	Delay[c]	LOS	Queue Length (feet)	Delay[c]	LOS
Grand Ave at SR-60 Westbound Off-Ramp[a]	404	26.4	C	260	26.5	C
Grand Ave at SR-60 Eastbound Ramps[a]	389	24.2	C	345	24.1	C
Grand Ave at Golden Springs Rd[b]	381	33.6	C	264	39.2	D
Alternative 3						
	AM Peak Period			PM Peak Period		
Intersection	Queue Length (feet)	Delay[c]	LOS	Queue Length (feet)	Delay[c]	LOS
Grand Ave at SR-60 Westbound Off-Ramp[a]	383	25.3	C	246	33.5	C
Grand Ave at SR-60 Eastbound Ramps[a]	232	12.9	B	230	8.1	A
Grand Ave at Golden Springs Rd[b]	381	33.5	C	259	37.3	D

[a] Queue length in feet on freeway off-ramp approach

[b] Queue length in feet on southbound approach

[c] Delay in seconds per vehicle average

Source: KOA Corporation 2010

Refer to the attached sheet for Table 6 (2035 ADT), Table 7 (2035 Truck Percentages), and Table 8 (Truck ADT).

Opening Year: If Facility Is an Interchange(s) or Intersection(s), Build and No Build Cross-street AADT, % and # Trucks, Truck AADT

Table 9. Opening-Year (2016) Cross Street ADT

Grand Avenue			
Segment	**Alt 1 (No-Project)**	**Alt 2**	**Alt 3A**
Grand Ave north of SR-60 WB On-/Off-Ramps	39,168	39,168	39,168
Grand Ave btwn SR-60 WB On-Ramp and EB Ramps	34,596	34,596	34,596
Grand Ave btwn SR-60 EB Ramps and Golden Springs Rd	31,246	31,246	31,246
Grand Ave btwn Golden Springs Rd and Chardonay Dr.	27,741	27,741	27,741
Golden Springs Drive			
Segment	**Alt 1 (No-Project)**	**Alt 2**	**Alt 3A**
Golden Springs Rd btwn Grand Ave and Lavender Dr.	25,474	25,474	25,474
Golden Springs Rd btwn Grand Ave and Racquet Club Dr.	18,066	18,066	18,066
Adapted from: KOA Corporation 2010			

Table 10. Opening-Year (2016) Truck ADT

Grand Avenue[a]			
Segment	**Alt 1 (No-Project)**	**Alt 2**	**Alt 3A**
Grand Ave north of SR-60 WB On-/Off-Ramps	3,917	3,917	3,917
Grand Ave btwn SR-60 WB On-Ramp and EB Ramps	3,460	3,460	3,460
Grand Ave btwn SR-60 EB Ramps and Golden Springs Rd	625	625	625
Grand Ave btwn Golden Springs Rd and Chardonay Dr.	555	555	555
Golden Springs Drive[b]			
Segment	**Alt 1 (No-Project)**	**Alt 2**	**Alt 3A**
Golden Springs Rd btwn Grand Ave and Lavender Dr.	509	509	509
Golden Springs Rd btwn Grand Ave and Racquet Club Dr.	361	361	361

Note: Truck ADT was obtained by multiplying the cross-street ADT shown in Table 9 by the truck percentages indicated below.

[a] Truck percentages on Grand Avenue were assumed to be 10% north of the freeway and on the Grand Avenue overcrossing structure, and truck percentages were assumed to be 2% south of the freeway.

[b] Truck percentages on Golden Springs Drive were assumed to be 2%.

Adapted from: KOA Corporation 2010

RTP Horizon Year/Design Year: If Facility Is an Interchange (s) or Intersection(s), Build and No Build Cross-street AADT, % and # Trucks, Truck AADT

Table 11. Horizon-Year (2035) Cross Street ADT

Grand Avenue			
Segment	**Alt 1 (No-Project)**	**Alt 2**	**Alt 3A**
Grand Ave north of SR-60 WB On-/Off-Ramp	61,630	61,630	61,630
Grand Ave btwn SR-60 WB On-Ramp and EB Ramps	50,555	50,555	50,555
Grand Ave btwn SR-60 EB Ramps and Golden Springs Rd	39,885	39,885	39,885
Grand Ave btwn Golden Springs Rd and Chardonay Dr.	34,000	34,000	34,000
Golden Springs Drive			
Segment	**Alt 1 (No-Project)**	**Alt 2**	**Alt 3A**
Golden Springs Rd btwn Grand Ave and Lavender Dr.	28,750	28,750	28,750
Golden Springs Rd btwn Grand Ave and Racquet Club Dr.	21,250	21,250	21,250
Adapted from: KOA Corporation 2010			

Table 12. Horizon-Year (2035) Truck ADT

Grand Avenue[a]			
Segment	**Alt 1 (No-Project)**	**Alt 2**	**Alt 3A**
Grand Ave north of SR-60 WB On-/Off-Ramps	6,163	6,163	6,163
Grand Ave btwn SR-60 WB On-Ramp and EB Ramps	5,056	5,056	5,056
Grand Ave btwn SR-60 EB Ramps and Golden Springs Rd	798	798	798
Grand Ave btwn Golden Springs Rd and Chardonay Dr.	680	680	680
Golden Springs Drive[b]			
Segment	**Alt 1 (No-Project)**	**Alt 2**	**Alt 3A**
Golden Springs Rd btwn Grand Ave and Lavender Dr.	575	575	575
Golden Springs Rd btwn Grand Ave and Racquet Club Dr.	425	425	425

Note: Truck ADT was obtained by multiplying the cross-street ADT shown in Table 11 by the truck percentages indicated below.

[a] Truck percentages on Grand Avenue were assumed to be 10% north of the freeway and on the Grand Avenue overcrossing structure, and truck percentages were assumed to be 2% south of the freeway.

[b] Truck percentages on Golden Springs Drive were assumed to be 2%.

Adapted from: KOA Corporation 2010.

Describe Potential Traffic Redistribution Effects of Congestion Relief *(impact on other facilities)*

As shown in Table 2, in 2016, ADT for all segments on SR-57 are anticipated to remain the same with implementation of either build alternative. On SR-60, the segments between Brea Canyon Road and SR-57 and Diamond Bar Boulevard and Philips Ranch Road are anticipated to remain the same with implementation of either build alternative. The SR-60 segment between the Grand Avenue on- and off-ramps is anticipated to experience a slight increase from 237,082 ADT to 237,086 ADT (+4 ADT) with implementation of either build alternative, while ADT on the segment between SR-57 and Grand Avenue is expected to decrease by 2,000 and the segments between Grand Avenue and the SR-57 Split and the SR-57 Split and Diamond Bar Boulevard are expected to decrease by 2,311 (Table 2). As shown in Table 6, in 2035, total ADT on all analyzed segments of SR-57 and the segment of SR-60 between Diamond Bar Boulevard and Philips Ranch Road is anticipated to remain the same with implementation of either build alternative. In 2035, ADT on the segment of SR-60 between Brea Canyon Road and SR-57 is expected to decrease by 3,375; between SR-57 and Grand Avenue by 6,750; between Grand Avenue and the SR-57 Split by 7,800, and; between the SR-57 Split and Diamond Bar Boulevard by 7,800 (Table 6). In 2035, ADT on the segment between the Grand Avenue on- and off-ramps will experience a slight increase of 12. The reductions in ADT associated with implementation of the build alternatives are at least partially attributable to the proposed construction of eastbound SR-60 bypass off-ramp to Grand Avenue beginning prior to the SR-57 merge. This project feature will help to eliminate weaving between eastbound SR-60 and northbound SR-57 (KOA Corporation 2010). In addition, an eastbound SR-60 bypass on-ramp would allow traffic from the Grand Avenue interchange to access eastbound SR-60 by using the proposed bypass connector without weaving across the three northbound lanes on mainline SR-57 (KOA Corporation 2010).

Also, as shown in Tables 3 and 7, it is anticipated there will be no increase in mainline diesel truck percentages with implementation of the proposed project. In addition, Table 4 indicates that truck ADT in 2016 for all analyzed segments of SR-57 and the segment of SR-60 between Brea Canyon Road and SR-57, Grand Avenue on- and off-ramps, and Diamond Bar Boulevard and Philips Ranch Road will remain the same with implementation of the proposed project. Implementation of the proposed project is anticipated to reduce mainline diesel truck ADT on SR-60 by 122 between SR-57 and Grand Avenue, by 151 between Grand Avenue and the SR-57 Split, and by 157 between the SR-57 Split and Diamond Bar Boulevard. Table 8 indicates that truck ADT in 2035 for all analyzed segments of SR-57 and the segment of SR-60 between Diamond Bar Boulevard and Philips Ranch Road is anticipated to remain the same with implementation of either build alternative. In addition, truck ADT is anticipated to decrease by 337 on the segment of SR-60 between Brea Canyon Road and SR-57, by 675 between SR-57 and Grand Avenue, by 780 between Grand Ave and the SR-57 Split, and by 780 between SR-57 Split and Diamond Bar Boulevard. The segment of SR-60 between the Grand Ave on- and off-ramps is anticipated to result in a slight increase from 26,160 to 26,161 (+1 ADT) in 2035.

As shown in Tables 9 and 10, cross-street ADT and truck ADT in 2016 is anticipated to remain the same with implementation of either build alternative, and Tables 11 and 12 show the same is true in 2035.

In addition, as shown in Table 5, LOS will ultimately improve at all intersections under all scenarios except for during the p.m. peak period at the Grand Avenue at Golden Springs Road intersection. LOS in the p.m. peak period at this intersection will remain at a designation of D under both Alternative 2 and Alternative 3.

As shown in Table 5, average delays at all intersections are anticipated to substantially improve with implementation of either build alternative. Under Alternative 2, in the a.m. peak period at the Grand Avenue at SR-60 Westbound Off-Ramp intersection, average delay is reduced from 170.9 seconds to 26.4 seconds with project implementation, a reduction of 144.5 seconds, and; in the p.m. peak period, average delay is reduced from 236.7 seconds to 26.5 seconds with project implementation, a reduction of 210.2 seconds. In the a.m. peak period at the Grand Ave at SR-60 eastbound ramps intersection, average delay is reduced from 113.7 seconds to 24.2 seconds with project implementation, a reduction of 89.5 seconds. In the p.m. peak period at the same intersection, average delay is reduced from 196.3 seconds to 24.1 seconds with project implementation, a reduction of 172.2 seconds. At the Grand Avenue at the Golden Springs Road intersection in the a.m. peak period, average delay is reduced from 34.3 seconds to 33.6 seconds with project implementation, a reduction of 0.7 seconds. In the p.m. peak period at the same intersection, average delay will decrease from 43.0 seconds to 39.2 seconds with

project implementation, a reduction of 3.8 seconds.

Average delays at all intersections are anticipated to improve with implementation of Alternative 3 also. In the a.m. peak period at the Grand Avenue at SR-60 Westbound Off-Ramp intersection, average delay is reduced from 170.9 seconds to 25.3 seconds with project implementation, a reduction of 145.6 seconds. At the same intersection in the p.m. peak period, average delay is reduced from 236.7 seconds to 33.5 seconds with project implementation, a reduction of 203.2 seconds. In the a.m. peak period at the Grand Avenue at SR-60 eastbound ramps intersection, average delay is reduced from 113.7 seconds to 12.9 seconds with project implementation, a reduction of 100.8 seconds. In the p.m. peak period at the same intersection, average delay is reduced from 196.3 seconds to 8.1 seconds with project implementation, a reduction of 188.2. At the Grand Avenue at Golden Springs Road intersection in the a.m. peak period, average delay is reduced from 34.3 seconds to 33.5 seconds with project implementation, a reduction of 0.8 second. In the p.m. peak period at the same intersection, average delay will decrease from 43.0 seconds to 37.3 seconds with project implementation, a reduction of 5.7 seconds.

Comments/Explanation/Details (attach additional sheets as necessary)

Mainline AADT on SR-60 and SR-57 is anticipated to exceed the FHWA and EPA's POAQC criterion of 125,000, as shown in Tables 2 and 6. In addition, Tables 3 and 7 summarize truck percentages on mainline SR-60 and SR-57 and indicates that truck percentages on SR-60 are in excess of the FHWA and EPA's POAQC threshold of 8 percent.

Although mainline ADT is anticipated to be in excess of 125,000 on SR-60, mainline ADT is anticipated to decrease with implementation of either alternative. As shown in Table 2, and as discussed above in the "potential traffic redistribution effects" section, ADT on SR-60 is anticipated to decrease with project implementation in 2016 due to construction of the eastbound SR-60 bypasses. Estimates also indicate an associated reduction in truck ADT (Table 4). Also, as indicated in Table 3, heavy duty truck percentages are expected to be unaffected with implementation of either build alternative. The same is true in 2035 (Tables 6 through 8).

In addition, although the eastbound SR-60 bypass off-ramp to Grand Avenue proposed under the build alternatives would move some traffic 64 feet closer to the Towne and County Preschool and Infant Care Center (21805 Copley Drive, Diamond Bar, CA) at the southwest end of the project (Figure 4), at the closest point, the preschool would be approximately 640 feet away from the eastbound bypass connector. According to CARB's *Air Quality and Land Use Handbook: A Community Health Perspective,* sensitive receptors over 500 feet from high volume roads are not anticipated to be adversely affected (California Air Resources Board 2005; Weddell pers. comm.). In addition, the highest traffic volumes on the eastbound bypass are expected to be around 725 during the a.m. peak period under both Alternative 2 and Alternative 3. Since 725 is a peak period traffic volume, not AADT, this is a worst case scenario traffic volume and is still well below the POAQC criterion of 125,000 AADT. Also, the preschool is elevated over 100 feet above the proposed ramp (KOA Corporation 2010; Weddell pers. comm.[a]). Refer to Figure 5 for intersection volumes and locations of bypasses associated with the build alternatives.

The proposed eastbound bypass connector at the SR-57/60 east junction would also move some traffic closer to a sensitive receptor near the northeast end of the project area: the Diamond Bar Montessori Academy at 23555 Palomino Drive, Diamond Bar, CA. The new bypass connector at the SR-57/60 east junction is expected to move a maximum traffic volume of 875 (Figure 5) 51 feet closer to the school during the p.m. peak period. The mainline is currently 202 feet from the school, and the proposed bypass would be 151 feet from the school. (Weddell pers. comm.[b].) Since 875 is a p.m. peak period traffic volume, not AADT, this is a worst case scenario traffic volume and is still well below the POAQC criterion of 125,000 AADT. In addition, as shown in Figure 6, the school is protected by mature trees. Also, as shown in Figure 5, the proposed bypass connector at the SR-57/60 east junction will be northwest of the existing eastbound SR-60 ramp from Diamond Bar Boulevard, and the proposed realignment of the eastbound SR-60 ramp from Diamond Bar Boulevard would not move traffic any closer to the Diamond Bar Montessori Academy (Weddell pers. comm. [b]).

Lastly, the proposed extension of the southbound SR-57 drop lane to a realigned westbound SR-60 off-ramp would move some traffic slightly closer to residential developments northwest of the project area. However, the highest volume of traffic predicted for both alternatives is projected to be 1,897 during the

p.m. peak period. Since 1,897 is a peak period traffic volume, not AADT, this is a worst case scenario traffic volume and is still well below the POAQC criterion of 125,000 AADT. In addition, residences northwest of the SR-57/SR-60 confluence are either elevated from the freeway or protected by a sound wall.

Consequently, Alternatives 2 and 3 are not considered POAQCs for PM10 and PM2.5 because neither alternative would result in increased diesel truck ADT or percentages, and the project would actually result in a reduction of diesel truck ADT on SR-60. In addition, the project would not move a substantial amount of traffic closer sensitive receptors in the project area. Because the proposed project is not considered a POAQC, the CAA and 40 CFR 93.116 requirements were met without a hot-spot analysis, since the build alternatives have been found to not be of air quality concern under 40 CFR 93.123(b)(1); therefore, implementation of the proposed project is not anticipated to contribute to additional exceedances of the NAAQS or CAAQS.

References:

Printed References:

California Air Resources Board. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective.* Table 1-1. April. Sacramento, CA.

KOA Corporation. 2010. *Traffic Study Report: Improvement Project of SR57/SR-60 Confluence at Grand Avenue Interchange in the City of Diamond Bar and the City of Industry.* May 28. (Job Number: JA6514.) Orange, CA. Prepared for WKE, Inc. Santa Ana, CA.

Personal Communications:

Aragues, Steven. Manager. Burger King (527 Grand Avenue, Diamond Bar, CA, 909 861-4760). June 2, 2009 – site visit; June 12, 2009—telephone conversation.

Knox, Ronn. Senior Transportation Planner. KOA Corporation, Orange, CA. August 4, 2010—e-mail to Dan Weddell from WKE, Inc. regarding project truck percentages.

Weddell, Dan [a]. Senior Project Manager. WKE, Inc., Santa Ana, CA. October 28, 2010—e-mail to Shannon Hill (ICF International) regarding distance from the project to the Towne and County Preschool and Infant Care Center.

Weddell, Dan [b]. Senior Project Manager. WKE, Inc., Santa Ana, CA. October 27, 2010—e-mail to Shannon Hill (ICF International) regarding distance from project components to the Diamond Bar Montessori Academy.

Zhou, Min. Professional Engineer. KOA Corporation, Orange, CA. February 25, 2010—e-mail to Shannon Hill (ICF International) regarding cross-street truck percentages.